

IN THE CLAIMS:

1. (Currently amended) A method in a logically partitioned data processing system including a plurality of logical partitions, an operating system debugger and partition management firmware, said partition management firmware being operable to allocate resources to and manage the plurality of logical partitions, said method comprising the steps of:

establishing extensions within said operating system debugger, said extensions enabling direct access to said resources of said partition management firmware by said operating system debugger; and

utilizing said extensions to debug said partition management firmware, wherein said operating system debugger without said extensions would not otherwise have direct access to said resources.

2. (Original) The method according to claim 1, further comprising the step of establishing function calls within said operating system debugger that when invoked by said operating system debugger cause said partition management firmware to execute partition management firmware operations.

3. (Original) The method according to claim 2, further comprising the steps of: establishing an event handler routine within said operating system debugger; invoking said event handler routine by said operating system debugger; and reporting, from said partition management firmware to said operating system debugger, partition management firmware events in response to said operating system debugger invoking said event handler routine.

4. (Currently amended) The method according to claim 2, further comprising the steps of:

establishing a read memory call within said operating system debugger;

invoking said read memory function call by said operating system debugger; and

directly reading data from a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said read memory function call.

5. (Currently amended) The method according to claim 2, further comprising the steps of:

establishing a write memory call within said operating system debugger;
invoking said write memory function call by said operating system debugger; and
directly writing data to a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said write memory function call.

6. (Original) The method according to claim 1, further comprising the steps of:
determining whether debugging is enabled within said partition management firmware;

permitting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management firmware; and

prohibiting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a determination that debugging is disabled within said partition management firmware.

7. (Original) The method according to claim 6, further comprising the steps of:
including a service processor within said data processing system;
enabling debugging within said partition management firmware utilizing said service processor; and
disabling debugging within said partition management firmware utilizing said service processor.

8. (Currently amended) The method according to claim 1, wherein said data processing system includes hardware comprising physical memory, wherein said

operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition and said hardware, and wherein said operating system debugger is operable to directly access said physical memory using said extensions in conjunction with said partition management firmware.

9. (Currently amended) A computer program product in a logically partitioned data processing system including a plurality of logical partitions, an operating system debugger and a partition management firmware, said partition management firmware being operable to allocate resources to and manage the plurality of logical partitions, comprising:

instruction means for establishing extensions within said operating system debugger, said extensions enabling direct access to said resources of said partition management firmware by said operating system debugger; and

instruction means for utilizing said extensions to debug said partition management firmware, wherein said operating system debugger without said extensions would not otherwise have direct access to said resources.

10. (Original) The product according to claim 9, further comprising instruction means for establishing function calls within said operating system debugger that when invoked by said operating system debugger cause said partition management firmware to execute partition management firmware operations.

11. (Original) The product according to claim 10, further comprising:

instruction means for establishing an event handler routine within said operating system debugger;

instruction means for invoking said event handler routine by said operating system debugger; and

instruction means for reporting, from said partition management firmware to said operating system debugger, partition management firmware events in response to said operating system debugger invoking said event handler routine.

12. (Currently amended) The product according to claim 10, further comprising:
instruction means for establishing a read memory call within said operating system debugger;
instruction means for invoking said read memory function call by said operating system debugger; and
instruction means for directly reading data from a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said read memory function call.
13. (Currently amended) The product according to claim 10, further comprising:
instruction means for establishing a write memory call within said operating system debugger;
instruction means for invoking said write memory function call by said operating system debugger; and
instruction means for directly writing data to a physical memory location utilizing said partition management firmware in response said operating system debugger invoking said write memory function call.
14. (Original) The product according to claim 9, further comprising:
instruction means for determining whether debugging is enabled within said partition management firmware;
instruction means for permitting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management firmware; and
instruction means for prohibiting said operating system debugger to utilize said extensions to debug said partition management firmware in response to a determination that debugging is disabled within said partition management firmware.
15. (Original) The product according to claim 14, further comprising:
instruction means for including a service processor within said data processing system;

instruction means for enabling debugging within said partition management firmware utilizing said service processor; and

instruction means for disabling debugging within said partition management firmware utilizing said service processor.

16. (Currently amended) The product according to claim 9, wherein said data processing system includes hardware comprising physical memory, wherein said operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition and said hardware, and wherein said operating system debugger is operable to directly access said physical memory using said extensions in conjunction with said partition management firmware.

17. (Currently amended) A logically partitioned data processing system including a plurality of logical partitions, an operating system debugger and a partition management firmware, said partition management firmware being operable to allocate resources to and manage the plurality of logical partitions, comprising:

extensions included within said operating system debugger, said extensions enabling direct access to said resources of said partition management firmware by said operating system debugger; and

said operating system debugger for utilizing said extensions to debug said partition management firmware, wherein said operating system debugger without said extensions would not otherwise have direct access to said resources.

18. (Original) The system according to claim 17, further comprising function calls established within said operating system debugger that when invoked by said operating system debugger cause said partition management firmware to execute partition management firmware operations.

19. (Original) The system according to claim 18, further comprising:
said operating system debugger including an event handler routine;
said operating system debugger for invoking said event handler routine; and

said partition management firmware for reporting to said operating system debugger partition management firmware events in response to said operating system debugger invoking said event handler routine.

20. (Currently amended) The system according to claim 18, further comprising:
said operating system debugger including a read memory call;
said operating system debugger for invoking said read memory function; and
said partition management firmware for directly reading data from a physical memory location in response said operating system debugger invoking said read memory function call.

21. (Currently amended) The system according to claim 18, further comprising:
said operating system debugger including a write memory call;
said operating system debugger for invoking said write memory function; and
said partition management firmware for directly writing data to a physical memory location in response said operating system debugger invoking said write memory function call.

22. (Original) The system according to claim 17, further comprising:
means for determining whether debugging is enabled within said partition management firmware;
said operating system debugger being permitted to utilize said extensions to debug said partition management firmware in response to a determination that debugging is enabled within said partition management firmware; and
said operating system debugger being prohibited from utilizing said extensions to debug said partition management firmware in response to a determination that debugging is disabled within said partition management firmware.

23. (Original) The system according to claim 22, further comprising:
a service processor included within said data processing system; and

said service processor for enabling and disabling debugging within said partition management firmware.

24. (Currently amended) The system according to claim 17, wherein said data processing system includes hardware comprising physical memory, wherein said operating system debugger exists within a partition, and further wherein said partition management firmware exists between said partition and said hardware, and wherein said operating system debugger is operable to directly access said physical memory using said extensions in conjunction with said partition management firmware.